

BH-MT-FEP

Medical grade FEP extruded tubing and heat shrink tubing

Features/Applications:

BH-MT-FEP is a fluorinated ethylene propylene (FEP) heat shrink tubing. FEP offers excellent liquid resistance, corrosion resistance, physiologically inert and human body surface contact performances. It is mainly used in electrosurgical medical instrument and medical component and equipment. FEP is the industry gold standard for reflowing catheter shafts and bonding joints heat shrinkable tubing has excellent electrical insulation properties.

- Shrink Ratio: Not shrink,1.3:1 and 1.6:1;
- Minimum shrink temperature: 110℃;
- Minimum fully recovery temperature: 210℃
- ISO 10993-1 compliant
- Compatibility with gamma rays and ETO sterilization
- Color: Transparent



Technical Data

Property		Test Method	Typical Data
Longitudinal change/%		ASTM D 2671	±5
Tensile strength/MPa		ASTM D 638	≥13.8
Elongation at break/%		ASTM D 638	≥150
Low temperature flexibility		AMS-DTL-23053 (-65°C, 4h)	No cracks
Dielectric strength/kV/mm		ASTM D 2671	≥19.7
Voltage withstand		ASTM D 149	2500V, 60s No breakdown
Volume resistivity/Ω·cm		ASTM D 876	≥10 ¹⁵
Water absorption/%		ASTM D 570	≤0.01
Corrosion		AMS-DTL-23053	Non-corrosion
Flammability		ASTM D 2671 C	Non-flammable
Clarity stability		AMS-DTL-23053	Pass
Heat resistance	Tensile strength/MPa	ASTM D 638	≥13.8
	Elongation at	ASTM D 638	≥200

Product Dimensions (mm)

Tab 1. Extruded Tubing

Model	Inside Diameter (mm)	Wall Thickness (mm)	Model	Inside Diameter (mm)	Wall Thickness (mm)
BH-MT-FEP-32	0.25±0.05	0.13±0.05	BH-MT-FEP-16	1.35±0.05	0.41±0.08
BH-MT-FEP-30	0.30±0.05	0.23±0.05	BH-MT-FEP-15	1.50±0.05	0.41±0.08
BH-MT-FEP-28	0.38±0.05	0.23±0.05	BH-MT-FEP-14	1.68±0.05	0.41±0.08
BH-MT-FEP-26	0.46±0.05	0.23±0.05	BH-MT-FEP-13	1.93±0.10	0.41±0.08
BH-MT-FEP-24	0.56±0.05	0.30±0.05	BH-MT-FEP-12	2.16±0.10	0.41±0.08
BH-MT-FEP-23	0.66±0.05	0.30±0.05	BH-MT-FEP-11	2.41±0.10	0.41±0.08
BH-MT-FEP-22	0.71±0.05	0.30±0.05	BH-MT-FEP-10	2.69±0.10	0.41±0.08

BH-MT-FEP-21	0.81±0.05	0.30±0.05	BH-MT-FEP-9	3.00±0.10	0.51±0.10
BH-MT-FEP-20	0.86±0.05	0.41±0.08	BH-MT-FEP-8	3.38±0.10	0.51±0.10
BH-MT-FEP-19	0.97±0.05	0.41±0.08	BH-MT-FEP-7	3.76±0.10	0.51±0.10
BH-MT-FEP-18	1.07±0.05	0.41±0.08	BH-MT-FEP-6	4.22±0.10	0.51±0.10
BH-MT-FEP-17	1.19±0.05	0.41±0.08	BH-MT-FEP-5	4.72±0.10	0.51±0.10

Tab 2. 1.3X and 1.6X shrinkage ratio

Model	As supplied(mm)	Fully recovered(mm)	
	ID(Min.)	ID(Max.)	W.T.
1.3:1 Shrink Ratio (Thick Type)			
BH-MT-FEP-1.3X-H-1.5	1.5	1.24	0.25±0.05
BH-MT-FEP-1.3X-H-2.0	2	1.54	0.25±0.05
BH-MT-FEP-1.3X-H-2.5	2.5	1.93	0.25±0.05
BH-MT-FEP-1.3X-H-2.8	2.8	2.1	0.25±0.05
BH-MT-FEP-1.3X-H-3.0	3	2.3	0.25±0.05
BH-MT-FEP-1.3X-H-3.5	3.5	3.5	0.25±0.05
BH-MT-FEP-1.3X-H-4.0	4	3.08	0.25±0.05
BH-MT-FEP-1.3X-H-4.7	4.7	3.62	0.25±0.05
BH-MT-FEP-1.3X-H-5.0	5	3.85	0.25±0.05
BH-MT-FEP-1.3X-H-5.5	5.5	4.24	0.25±0.05
BH-MT-FEP-1.3X-H-6.0	6	4.62	0.25±0.05
BH-MT-FEP-1.3X-H-6.5	6.5	5.1	0.25±0.05
BH-MT-FEP-1.3X-H-7.0	7	5.4	0.25±0.05
BH-MT-FEP-1.3X-H-8.0	8	6.16	0.25±0.05
BH-MT-FEP-1.3X-H-9.0	9	6.93	0.25±0.05
BH-MT-FEP-1.3X-H-10.0	10	7.7	0.25±0.05
BH-MT-FEP-1.3X-H-11.0	11	8.47	0.25±0.05
1.3:1 Shrink Ratio (Thin Type)			
BH-MT-FEP-1.3X-B-1.5	1.5	1.24	0.15±0.08
BH-MT-FEP-1.3X-B-2.0	2	1.54	0.15±0.08
BH-MT-FEP-1.3X-B-2.5	2.5	1.93	0.15±0.08
BH-MT-FEP-1.3X-B-2.8	2.8	2.1	0.15±0.08
BH-MT-FEP-1.3X-B-3.0	3	2.3	0.15±0.08
BH-MT-FEP-1.3X-B-3.5	3.5	3.5	0.15±0.08
BH-MT-FEP-1.3X-B-4.0	4	3.08	0.15±0.08
BH-MT-FEP-1.3X-B-4.7	4.7	3.62	0.15±0.08
BH-MT-FEP-1.3X-B-5.0	5	3.85	0.15±0.08
BH-MT-FEP-1.3X-B-5.5	5.5	4.24	0.15±0.08
BH-MT-FEP-1.3X-B-6.0	6	4.62	0.15±0.08
BH-MT-FEP-1.3X-B-6.5	6.5	5	0.15±0.08
BH-MT-FEP-1.3X-B-7.0	7	5.4	0.15±0.08
BH-MT-FEP-1.3X-B-8.0	8	6.16	0.15±0.08
BH-MT-FEP-1.3X-B-9.0	9	6.93	0.15±0.08
BH-MT-FEP-1.3X-B-10.0	10	7.7	0.15±0.08
BH-MT-FEP-1.3X-B-11.0	11	8.47	0.15±0.08

1.6:1 Shrink Ratio			
BH-MT-FEP-1.6X-2.0	2	1.25	0.25±0.05
BH-MT-FEP-1.6X-2.5	2.5	1.57	0.25±0.05
BH-MT-FEP-1.6X-2.8	2.8	1.75	0.25±0.05
BH-MT-FEP-1.6X-3.0	3	1.88	0.25±0.05
BH-MT-FEP-1.6X-3.5	3.5	2.19	0.25±0.05
BH-MT-FEP-1.6X-4.0	4	2.5	0.25±0.05
BH-MT-FEP-1.6X-4.7	4.7	2.94	0.25±0.05
BH-MT-FEP-1.6X-5.0	5	3.13	0.25±0.05
BH-MT-FEP-1.6X-5.5	5.5	3.44	0.25±0.05
BH-MT-FEP-1.6X-6.0	6	3.75	0.25±0.05
BH-MT-FEP-1.6X-6.5	6.5	4.07	0.25±0.05
BH-MT-FEP-1.6X-7.0	7	4.4	0.25±0.05
BH-MT-FEP-1.6X-8.0	8	5	0.25±0.05
BH-MT-FEP-1.6X-9.0	9	5.63	0.25±0.05
BH-MT-FEP-1.6X-10.0	10	6.25	0.25±0.05
BH-MT-FEP-1.6X-11.0	11	6.88	0.25±0.05